

Rear brake calipers, servicing

WARNING!

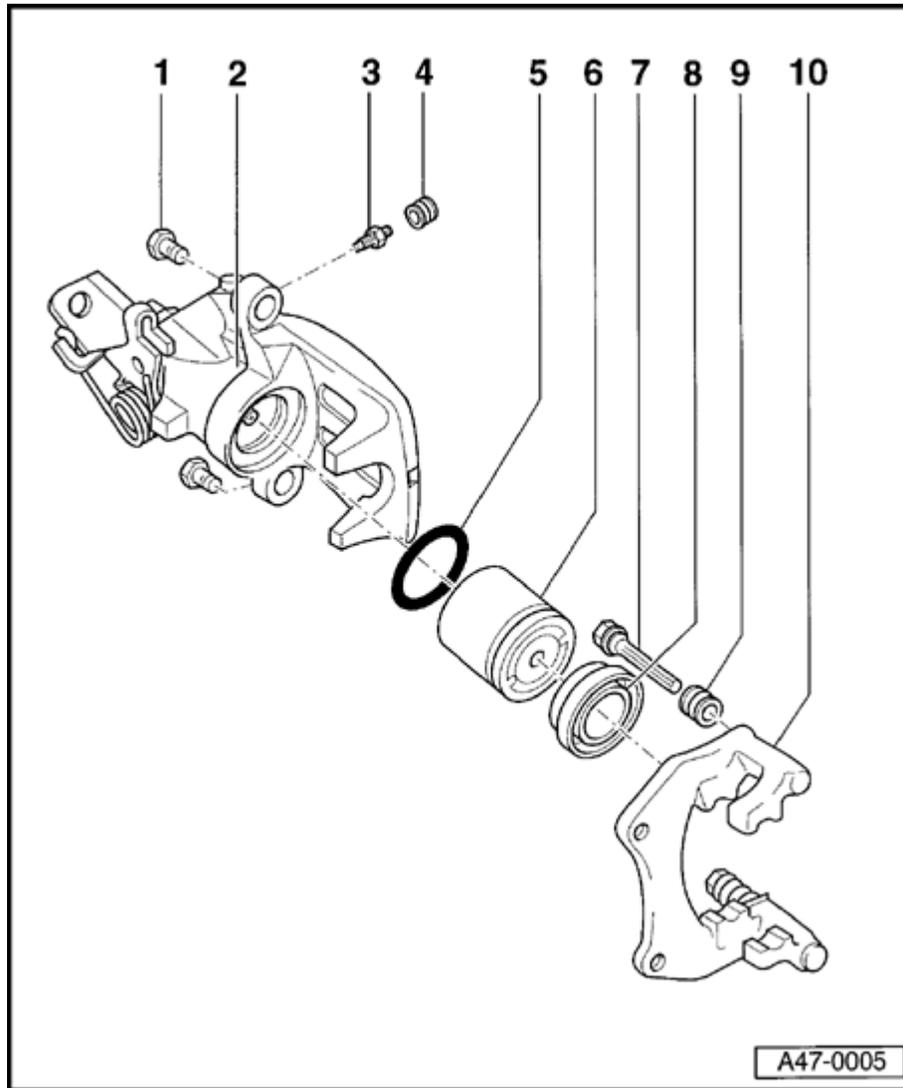
- ◆ **Do not re-use fasteners that are worn or deformed in normal use.**
- ◆ **Some fasteners are designed to be used only once, and are unreliable and may fail if used a second time. This includes, but is not limited to, nuts, bolts, washers, circlips and cotter pins. Always follow recommendations in this manual-replace these fasteners with new parts where indicated, and any other time it is deemed necessary by inspection.**

Note:

- ◆ *Install only the complete repair kit when performing servicing work.*
- ◆ *Apply a thin coat of assembly paste to brake cylinders, pistons and seals.*

1 - Self-locking bolt

- ◆ Always replace
- ◆ 35 Nm (26 ft lb)
- ◆ Counter-hold guide pin when loosening and tightening



2 - Brake caliper housing

- ◆ Replace caliper if leaks appear at lever for parking brake cable
- ◆ After servicing, pre-bleed brake caliper housing ⇒ [Fig. 6](#)
- ◆ 1997 ➤ aluminum brake calipers are installed
- ◆ Servicing aluminum brake calipers ⇒ [page 47-19](#)

3 - Bleeder valve

4 - Dust cap

- ◆ Install on bleeder valve

5 - Seal

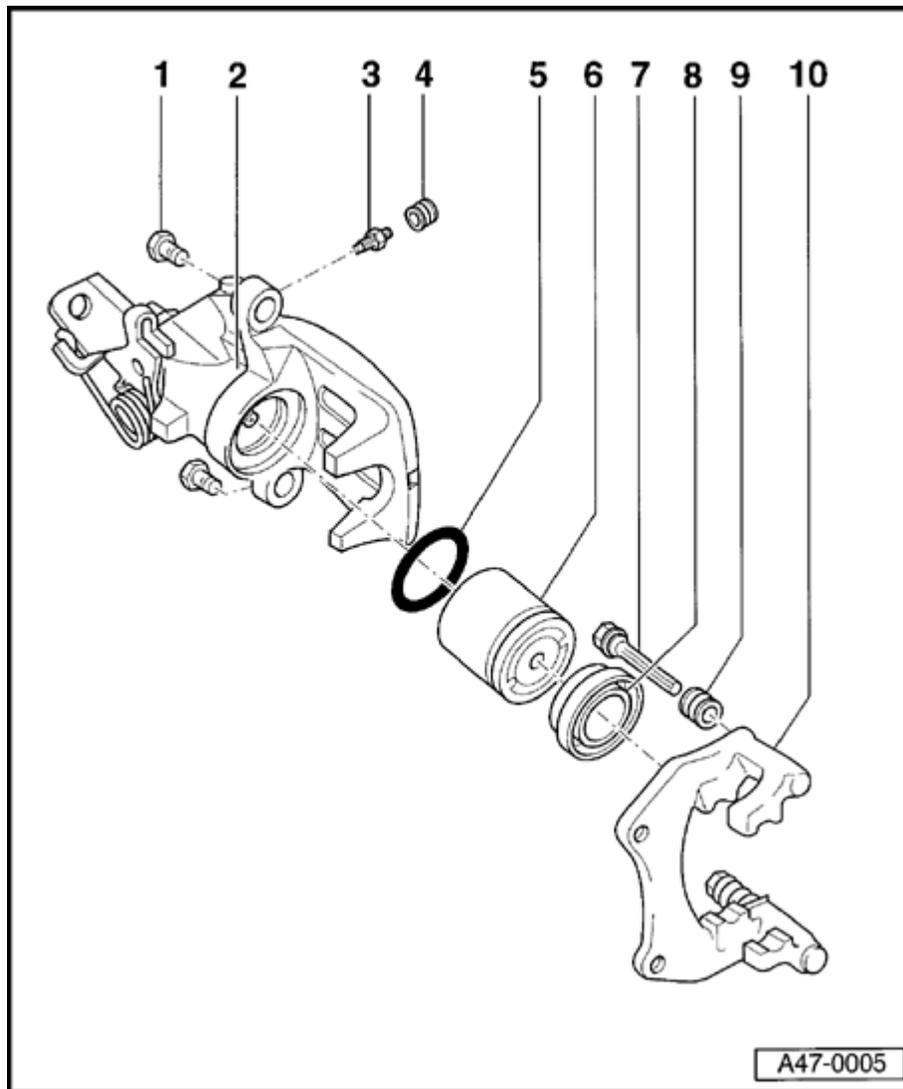
- ◆ Use 3409 wedge to remove ⇒ [Fig. 3](#)

6 - Piston

- ◆ With automatic adjuster for parking brake
- ◆ Removing from brake caliper housing ⇒ [Fig. 1](#)
- ◆ Installing into brake caliper housing ⇒ [Fig. 5](#)
- ◆ Servicing aluminum brake calipers ⇒ [page 47-19](#)

7 - Guide pin

- ◆ Grease before installing the protective boot



8 - Protective seal

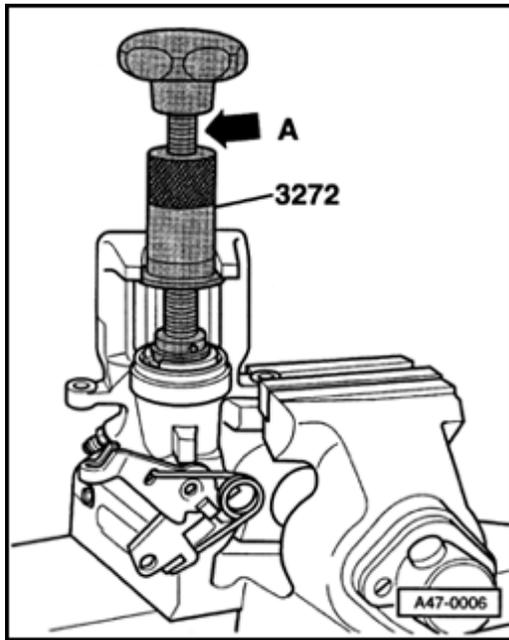
- ◆ Install with outer sealing lip on piston ⇒ [Fig. 2](#)
- ◆ Insert inner sealing lip into groove in brake caliper housing ⇒ [Fig. 4](#)

9 - Protective boot

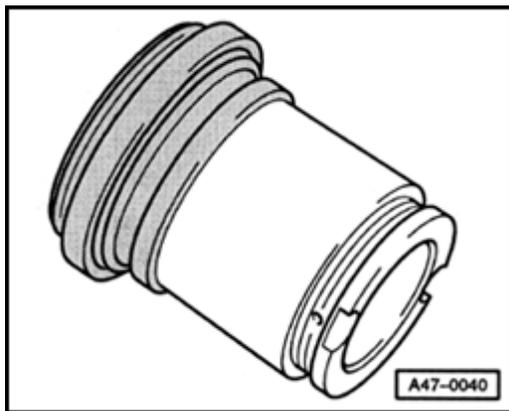
- ◆ Install on brake carrier and guide pin

10 - Brake carrier

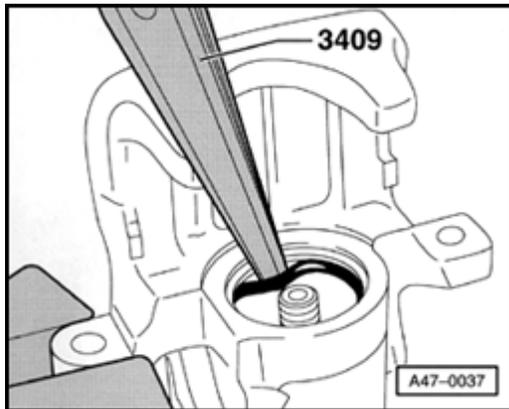
- ◆ With guide pins and protective boots
- ◆ Supplied as a pre-assembled replacement part with an adequate quantity of grease on the guide pins
- ◆ Install repair kit if protective boots are damaged
- ◆ Use grease supplied with repair kit for greasing the guide pins



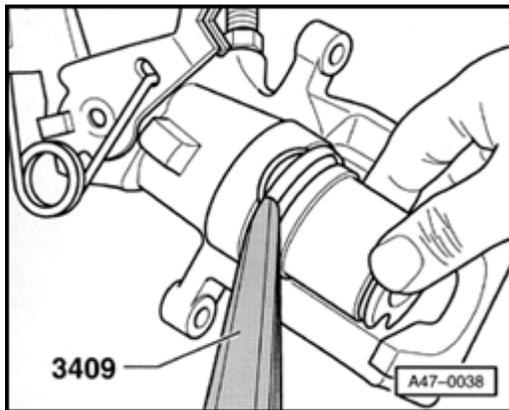
A Fig. 1 Unscrewing piston from brake caliper housing using 3272 reset and screwout tool



A Fig. 2 Installing protective seal with outer sealing lip onto piston



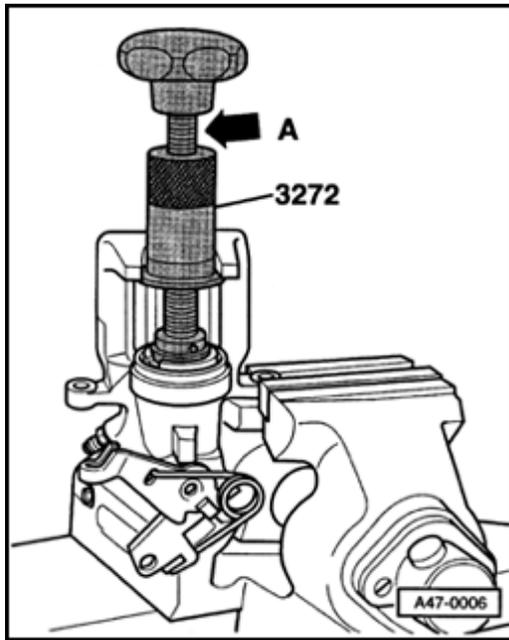
A Fig. 3 Use 3409 wedge to remove seal



A Fig. 4 Inserting inner sealing lip of protective seal into groove in brake caliper housing using 3409 wedge

Note:

Hold piston in front of the brake caliper housing when performing this step.

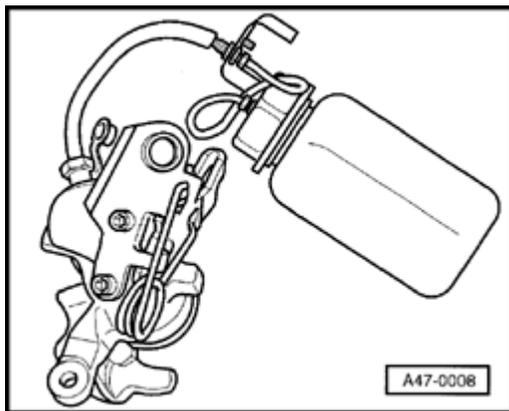


A **Fig. 5** Turning piston into brake caliper housing until fully seated

- When screwing in, press firmly on the piston.

Note:

The outer sealing lip of the protective seal will then locate in the piston groove.



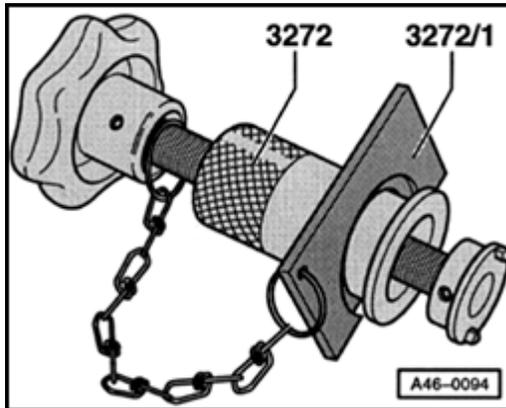
A **Fig. 6** Pre-bleeding brake caliper

Note:

Position brake caliper upright for pre-bleeding, as shown.

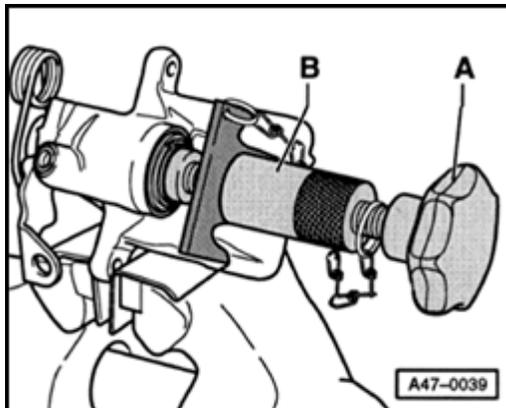
- Open bleeder valve and fill with brake fluid, using commercially available bleeder bottle, until brake fluid flows out of threaded hole (brake hose connection) free of bubbles.
- Close bleeder valve.

Aluminum rear brake caliper pistons, removing and installing



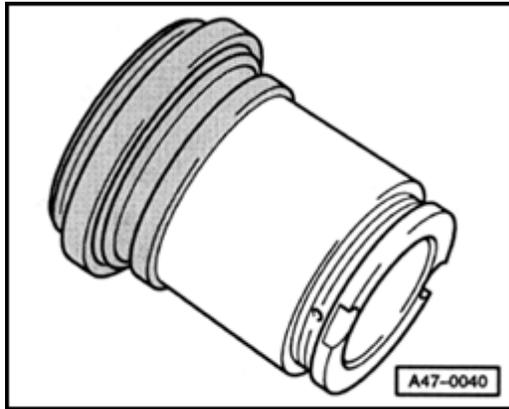
▲ Special tools and equipment

- ◆ 3409 wedge
- ◆ 3272 reset and screwout tool
- ◆ 3272/1 support plate

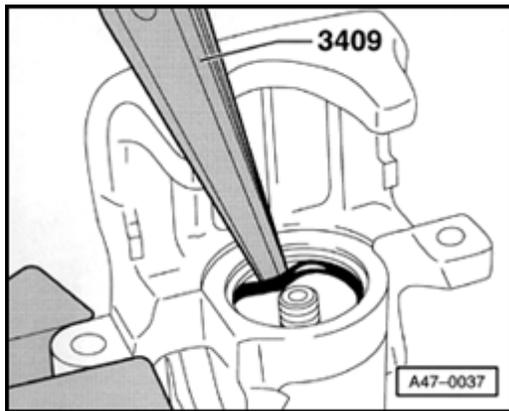


▲ Unscrewing piston from the brake caliper housing

- Remove piston by turning threaded spindle -A- counterclockwise and knurled section -B- clockwise.

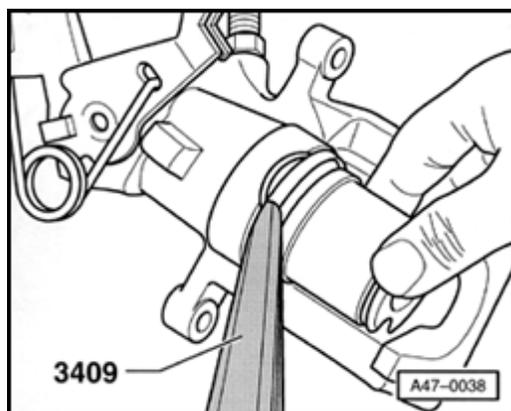


▲ Installing protective seal with outer sealing lip over piston



▲ Removing seal using 3409 wedge

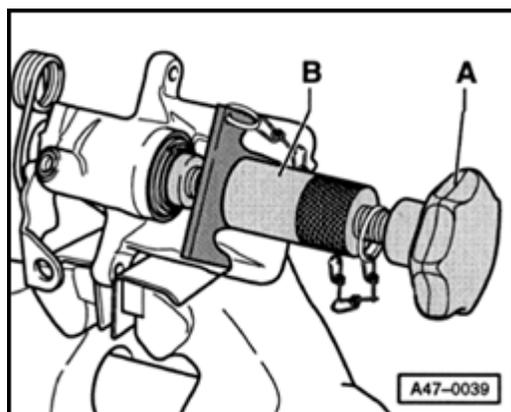
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A Installing inner sealing lip of protective seal using 3409 wedge

Note:

Hold the piston in front of the caliper housing for this procedure.



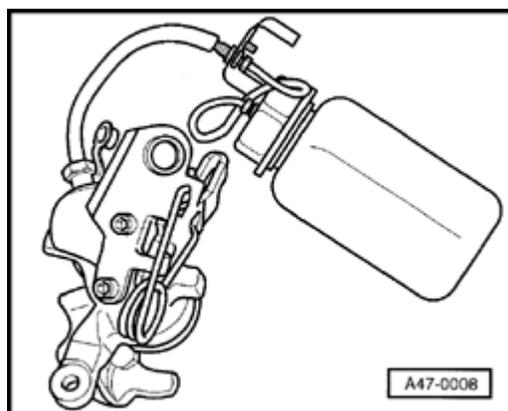
A Turning piston into brake caliper housing to stop

- Turn piston in by turning threaded spindle -A- clockwise and knurled section -B- counterclockwise.

Note:

The outer sealing lip of the protective seal will then locate in the piston groove.

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**A Pre-bleeding brake caliper****Note:**

Position brake caliper upright for pre-bleeding, as shown.

- Open bleeder valve and fill with brake fluid, using commercially available bleeder bottle, until brake fluid flows out of threaded hole (brake hose connection) free of bubbles.
- Close bleeder valve.